



Statement of

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Introduction

Good afternoon Mr. Chairman, Ranking Member, and Members of the Committee. My name is Jonathan Ramseur and I am a Specialist in Environmental Policy in the Congressional Research Service (CRS). On behalf of CRS, I would like to thank the Committee for inviting me to testify here today. I have been asked by the Committee to discuss the Clean Water Act allotment formula for distributing funds under the Clean Water State Revolving Fund program to states, U.S. territories, and Indian tribes. This program is the primary federal funding program for wastewater and stormwater infrastructure.

My testimony will provide historical background of the program, the allotment formula for distributing funds to the states, proposed and potential options for adjusting the allotment, and associated considerations. Please note that CRS does not provide recommendations or take a position on specific legislation.

Federal Funding History for Wastewater Infrastructure

The principal law governing pollution of the nation's surface waters is the Federal Water Pollution Control Act, or Clean Water Act (CWA), which was originally enacted in 1948.¹ Comprehensive amendments in 1972 revised the act and provided its current framework.² The 1972 CWA established programs and requirements for water quality improvement that have since been expanded. Industries, municipalities, and other entities continue to implement these CWA requirements.

Prior to 1972, the federal government administered a comparatively small program of aid for constructing municipal wastewater treatment plants.³ Under this program, the federal government allocated funding to the states on the basis of population. There was no statutory formula. Nor was there a systematic process for the federal government or states to estimate and report on funding needs for sewage treatment.

Title II of the 1972 CWA authorized grants to states for wastewater treatment plant construction under a program administered by the U.S. Environmental Protection Agency (EPA). Federal funds were provided through annual appropriations under a state-by-state allocation formula contained in the act. States used their annual allotments to make grants to local governments to build or upgrade categories of wastewater treatment projects, including treatment plants and related sewer infrastructure.

The Water Quality Act of 1987 (P.L. 100-4) amended the CWA to establish the Clean Water State Revolving Fund program, discussed below. After a two-year transition period, this program effectively replaced the CWA Title II grants program. Between FY1973 and FY1990, Congress appropriated nearly \$52 billion under the CWA Title II program, representing the largest nonmilitary public works program since the Interstate Highway System.

Figure 1 illustrates the history of EPA wastewater infrastructure appropriations from FY1973 to FY2026 in both nominal dollars and inflation-adjusted (2018) dollars. The increase in FY2009 was due to \$4.0 billion in emergency supplemental appropriations from the American Recovery and Reinvestment Act of 2009 (P.L. 111-5). The appropriations for FY2022 through FY2026 include emergency supplemental

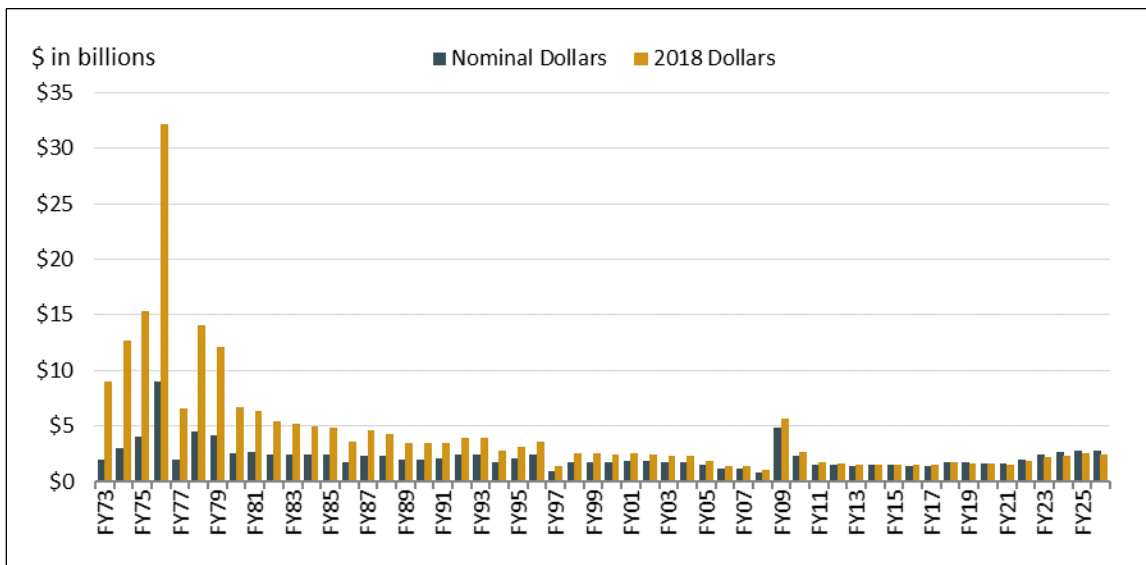
¹ For more information, see CRS Report RL30030, *Clean Water Act: A Summary of the Law*, by Laura Gatz.

² Federal Water Pollution Control Act Amendments in 1972 (P.L. 92-500); codified generally as 33 U.S.C. §§1251-1387.

³ The Water Pollution Control Act of 1948 (P.L. 80-845) first started the federal aid to municipal wastewater treatment authorities.

appropriations provided in the Infrastructure Investment and Jobs Act (IIJA, P.L. 117-58). The figure does not include funding through the annual appropriations process for FY2022.⁴

Figure 1. EPA Wastewater Infrastructure Annual Appropriations
Adjusted (\$2018) and Not Adjusted for Inflation (Nominal)



Source: Prepared by CRS using information from annual appropriations acts, committee reports, and explanatory statements presented in the Congressional Record. Amounts reflect applicable rescissions and supplemental appropriations, including \$4 billion in the American Recovery and Reinvestment Act of 2009 (P.L. 111-5). Constant dollars calculated from Office of Management of Budget, Table 10.1, “Gross Domestic Product and Deflators Used in the Historical Tables: 1940–2026,” <https://www.whitehouse.gov/omb/historical-tables/>. The deflator values used for FY2021 through FY2026 are estimates.

Notes: The funding levels for FY2022 through FY2026 are likely to change reflecting funding for the CWSRF through annual appropriations. As of March 10, 2022, the House and Senate have passed an FY2022 omnibus appropriations bill (H.R. 2471). It is now awaiting the President’s signature. The Consolidated Appropriations Act, 2022 would provide \$1.639 billion for the CWSRF program in FY2022. Of this amount, \$443 million would be provided as “Community Project Funding Items/Congressionally Directed Spending.” For more historical details, see CRS Report 96-647, *Water Infrastructure Financing: History of EPA Appropriations*, by Jonathan L. Ramseur and Mary Tiemann.

Estimates of Wastewater Infrastructure Funding Needs

The federal government published the first funding needs survey for wastewater infrastructure in 1968.⁵ This early survey was less comprehensive than subsequent surveys, containing estimates for a relatively narrow range of wastewater infrastructure categories. The 1972 CWA directed the EPA to prepare wastewater infrastructure needs surveys. CWA Section 516(b)(1)(B) states

The Administrator, in cooperation with the States, including water pollution control agencies and other water pollution control planning agencies, shall make ... a detailed estimate, biennially revised, of the cost of construction of all needed publicly owned treatment works in all of the States and of the cost of construction of all needed publicly owned treatment works in each of the States.

⁴ As of March 10, 2022, the House and Senate have passed an FY2022 omnibus appropriations bill (H.R. 2471), for presentment to the President. The act would provide \$1.639 billion for the CWSRF program in FY2022. Of this amount, \$443 million would be provided as “Community Project Funding Items/Congressionally Directed Spending.”

⁵ This survey was published in response to a general requirement in the 1966 Clean Water Restoration Act (P.L. 89-753) for an annual report on “the economics of clean water.”

Since the enactment of the 1972 CWA, EPA has published 16 Clean Watersheds Needs Surveys. Since 1996, EPA has typically published a new survey every four years. EPA published its most recent survey in 2016, documenting infrastructure needs from 2012. In this survey, EPA estimated that the capital cost of wastewater infrastructure needed to meet statutory water quality and public health requirements and objectives exceeds \$270 billion over a 20-year period.⁶ Other organizations using different methods have estimated larger costs for wastewater infrastructure needs.⁷

Clean Water State Revolving Fund Program

Amendments to the CWA in 1987 established the Clean Water State Revolving Fund (CWSRF) program. The CWSRF program is the key federal funding program that helps finance wastewater infrastructure projects throughout the country.⁸ As amended in 2014, the CWSRF program provides financial assistance to a range of eligible recipients, including municipalities, state agencies, and certain private and nonprofit entities, to support a range of eligible projects and activities. These include construction of wastewater treatment works and stormwater systems, management of nonpoint source pollution, and replacement of decentralized systems (e.g., septic tanks), among others.⁹

The CWSRF program is implemented at the state level, with each state and Puerto Rico administering its own SRF program.¹⁰ Using annual appropriations, EPA makes grants to states to capitalize their state revolving loan funds. EPA allots CWSRF funds among states based on a CWA statutory formula, discussed below, which provides a minimum share of 0.5% to each state and has effectively been in place since the beginning of the program in 1987. Each year, each state must match 20% of its annual capitalization grant and develop an intended use plan (IUP) indicating how the allotted funds will be used.¹¹ The CWA requires EPA to annually review states' implementation activities and periodically audit state programs.¹²

SRF programs primarily provide subsidized loans to publicly owned treatment works. Subsidized loans reduce the cost of such infrastructure projects to communities. Communities repay loans into the fund, thus making resources available for projects in other communities. Over time, the federal grants and state match—combined with funds from loan repayments, leveraged bonds, and other sources—are intended to generate an ongoing, revolving source of water infrastructure funding at the state level.

Prior to 2014, states were authorized to provide CWSRF financial assistance for a range of projects and activities that was more narrow than the list of eligible projects and activities available today. This earlier list generally included the construction or repair of publicly owned municipal wastewater treatment plants, related equipment and piping, and stormwater systems. CWA Section 602 requires all funds in the CWSRF resulting from federal capitalization grants first be used to assure compliance with enforceable

⁶ See EPA, *Clean Watersheds Needs Survey (CWNS) Report to Congress—2012*, 2016, <https://www.epa.gov/cwns>.

⁷ For example, see American Society of Civil Engineers, *Infrastructure Report Card*, Wastewater, 2021, <https://infrastructurereportcard.org/wp-content/uploads/2020/12/Wastewater-2021.pdf>.

⁸ 33 U.S.C. §§1381-1387. For more details regarding the history of the CWSRF and its predecessor grant program in CWA Title II, see CRS Report 96-647, *Water Infrastructure Financing: History of EPA Appropriations*, by Jonathan L. Ramseur and Mary Tiemann.

⁹ 33 U.S.C. §1383.

¹⁰ The CWA requires EPA to provide direct grants to the District of Columbia, the U.S. Virgin Islands, American Samoa, Guam, the Commonwealth of Northern Marianas, and Indian tribes for wastewater infrastructure improvements (33 U.S.C. §1362 and §1377). The funding for the District of Columbia, U.S. territories, and Indian tribes is part of the total SRF appropriations to EPA.

¹¹ 33 U.S.C. §1386.

¹² 33 U.S.C. §1386.

deadlines, goals, and requirements of the act, including municipal compliance.¹³ After satisfying the “first use” requirement, funds may be used to implement other eligible uses. Prior to 2014, additional eligible uses included nonpoint source management programs and estuary activities in approved State Nonpoint Management Programs and estuarine Comprehensive Conservation and Management Plans, respectively.¹⁴

In 2014, the Water Resources Reform and Development Act of 2014 (WRRDA; P.L. 113-121) amended the authorized, adding several projects and activities, including

- measures to manage, reduce, treat, or recapture stormwater or subsurface drainage water;
- replacement of decentralized treatment systems (e.g., septic tanks);
- energy-efficiency improvements at treatment works;
- reuse and recycling of wastewater or stormwater; and
- security improvements at treatment works.

In 2018, the America's Water Infrastructure Act of 2018 (AWIA; P.L. 115-270) amended the list of eligible activities to allow qualified nonprofits to provide assistance to certain individuals for the repair or replacement of existing decentralized wastewater treatment systems or for the connection of an individual household to a centralized publicly owned treatment works.

Although the CWSRF was originally established as a loan program, Congress has modified this framework over time to allow for other types of assistance. Beginning with the American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111-5), states were required to use at least 50% of their ARRA funds to “provide additional subsidization to eligible recipients in the form of forgiveness of principal, negative interest loans or grants or any combination of these.” Subsequent appropriation acts have included similar conditions, with varying percentages that states were required to provide as additional subsidization. In 2014, WRRDA amended the CWA to *allow* states, under certain conditions, to use their CWSRF programs to provide additional subsidization, generally up to 30% of the state’s annual allotment.¹⁵ In addition, in 2021, IIJA amended the CWA to direct states to use at least 10% of their capitalization grant for additional subsidization. Thus, the CWA now requires states to use 10% of their annual SRF allotment for additional subsidization, and provides the discretion for them to use (generally) up to 30% for this purpose.

Figure 2 illustrates the enacted appropriations for the CWSRF program. The figure depicts regular appropriations between FY1989 and FY2021. As the figure indicates, regular appropriation levels have remained relatively consistent in recent years. The figure also illustrates (1) the supplemental appropriations from the American Recovery and Reinvestment Act of 2009, which provided \$4 billion in FY2009, and (2) supplemental appropriations from the Infrastructure Investment and Jobs Act (IIJA, P.L. 117-58), which provided supplemental appropriations for FY2022 through FY2026.¹⁶

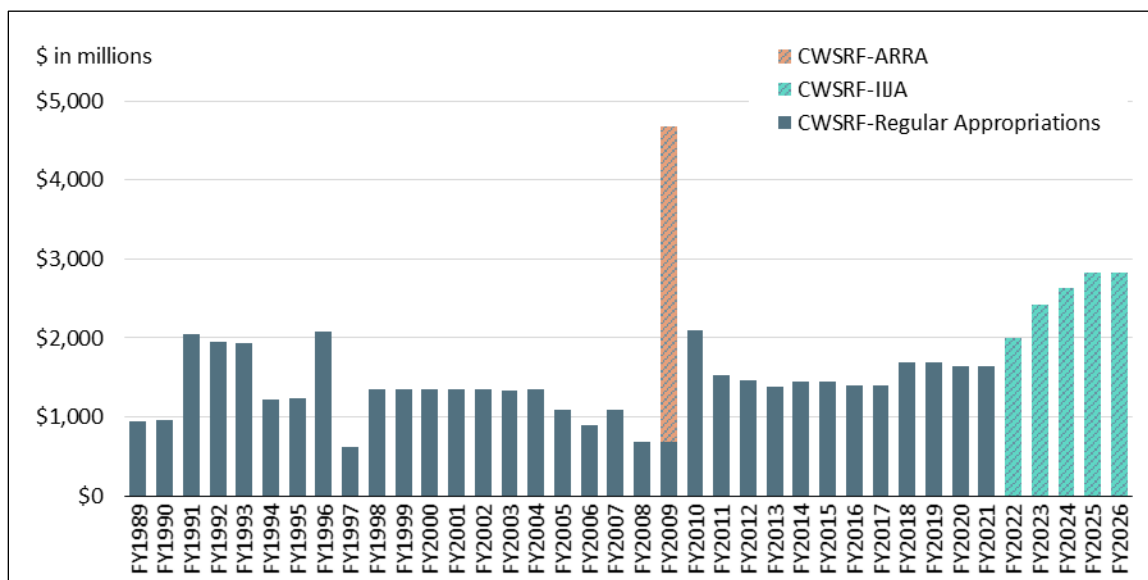
¹³ 33 U.S.C. §1382(b)(5).

¹⁴ 33 U.S.C. §1383(c).

¹⁵ 33 U.S.C. §1383(i).

¹⁶ For more information, see CRS Report R46892, *Infrastructure Investment and Jobs Act (IIJA): Drinking Water and Wastewater Infrastructure*, by Elena H. Humphreys and Jonathan L. Ramseur.

Figure 2. CWSRF Appropriations: FY1989-FY2026
(not adjusted for inflation)



Source: Prepared by CRS using information from annual appropriations acts, ARRA, IIJA, committee reports, and explanatory statements presented in the Congressional Record.

Notes: ARRA = American Recovery and Reinvestment Act of 2009 (P.L. 111-5); IIJA = Infrastructure Investment and Jobs Act (P.L. 117-58), signed by President Biden on November 8, 2021. IIJA provided supplemental appropriations for the CWSRF for FY2022 through FY2026. As of the date of this testimony, Congress has not enacted appropriations for FY2022. Amounts reflect applicable rescissions but do not include supplemental appropriations for specific locations in P.L. 116-20 and P.L. 116-113 or special purpose project grants (often referred to as "earmarks"). For more information, see CRS Report 96-647, *Water Infrastructure Financing: History of EPA Appropriations*, by Jonathan L. Ramseur and Mary Tiemann.

The funding levels for FY2022 through FY2026 are likely to change reflecting funding for the CWSRF through annual appropriations. As of March 10, 2022, the House and Senate have passed an FY2022 omnibus appropriations bill (H.R. 2471), for presentment to the President. The Consolidated Appropriations Act, 2022 would provide \$1.639 billion for the CWSRF program in FY2022. Of this amount, \$443 million would be provided as "Community Project Funding Items/Congressionally Directed Spending." Some may refer to this funding as "earmarks."¹⁷

History of CWA Funding Allotments¹⁸

Prior to the 1972 CWA, the federal government administered a comparatively small program of aid for constructing municipal wastewater treatment plants.¹⁹ Under this program, assistance was allocated to

¹⁷ For more information, see CRS Report R46722, *Community Project Funding: House Rules and Committee Protocols*, by Megan S. Lynch.

¹⁸ For a more detailed and comprehensive discussion, see CRS Report RL31073, *Allocation of Wastewater Treatment Assistance: Formula and Other Changes*, by Jonathan L. Ramseur.

¹⁹ The Water Pollution Control Act of 1948 (P.L. 80-845) started the trickle of federal aid to municipal wastewater treatment authorities that grew in subsequent years. It authorized loans for treatment plant construction. With each successive statute in the 1950s and 1960s, federal assistance to municipal treatment agencies increased. A grant program replaced the loan program; the amount of authorized funding went up; the percentage of total costs covered by federal funds was raised; and the types of project costs deemed grant-eligible were expanded.

states on the basis of population. There was no statutory formula. Nor was there a systematic process for the federal government or states to estimate and report on funding needs for sewage treatment.

Congress established a statutory formula governing distribution of financial aid for municipal wastewater treatment in the 1972 CWA. Between 1972 and 1987, Congress modified the formula and incorporated other eligibility changes multiple times, generating debate on each occasion. **Table 1** provides a general summary of the components of the different allotment formulas used for funding wastewater infrastructure, from the pre-1973 program to the CWA Title II construction grant program that was in effect during most of the 1970s and 1980s, to the CWSRF program established in 1987 that is in effect today. In the table, the term “total needs” refers to funding needs identified by states for all categories of projects and water quality activities eligible for assistance. The term “partial needs” refers to a subset of eligible project categories, primarily construction or upgrades to comply with the act’s minimum requirement that municipalities achieve secondary treatment of wastewater. When population was used as a factor, differences occurred over whether a current or future year population estimate was appropriate.

Table 1. Needs and Population Components of CWA Allotments

Fiscal Year	Total Needs	Partial Needs	Population
Pre-1973	—	—	100%
1973-1974	100%	—	—
1975-1976	50%	50%	—
1977 (P.L. 94-369)	—	50%	50%
1977 (P.L. 95-26)	25%	50%	25%
1978-1982	25%	50%	25%
1983-1986	12.5%	50%	37.5%
1987-present	uncertain	uncertain	uncertain

Source: Excerpted from CRS Report RL31073, *Allocation of Wastewater Treatment Assistance: Formula and Other Changes*, by Jonathan L. Ramseur.

In addition to the needs and population components, earlier allotment formulas contained other factors not identified in the above table. In particular, on several occasions when Congress amended state allotments, the allotment change included “hold harmless” or “minimum share” provisions. These factors were added to minimize potential disruptions when new allocations were adopted.

FY1973-FY1974 Allotment

The 1972 CWA provided the first statutory allocation formula, governing state-by-state allocations in FY1973 and FY1974. Although the Senate favored retaining population as the sole allocation factor, the final version’s allocation scheme was entirely needs-based. A rationale for changing to a needs basis for grants allocation despite limitations of available needs information was explained in the House Public Works Committee’s report on the 1972 legislation.²⁰

This needs formula is a sound basis for allotting funds since our experience to date clearly demonstrates that there is no necessary correlation between the financial assistance needed for waste treatment works in a given State and its population.

²⁰ U.S. Congress, Senate Committee on Public Works, *A Legislative History of the Water Pollution Control Act Amendments of 1972*, January 1973, Serial No. 93-1. 93rd Cong., 1st sess. p. 780.

The Committee is fully aware that at the present time there is no satisfactory estimate of the total funds required by the States for construction of publicly owned treatment works... However [the 1972 Needs Survey] report does provide some measure of the relative needs of the various States and in the absence of any better measure has been incorporated in the bill for the determination of the State allotments for the fiscal years 1973 and 1974.

FY1975-FY1976 Allotment

EPA's 1973 Needs Survey provided needs estimates by state for different categories of wastewater infrastructure. EPA recommended that the revised allocation formula should only include the costs of certain categories of need estimates, namely the categories providing treatment works to achieve secondary treatment. In addition, EPA reported that its estimates were incomplete for certain categories and not consistent among the states.

Both chambers offered proposals to amend the allocation. The Senate version recommended a distribution based 75% on partial needs and 25% on population.²¹ The House and final version included an allocation that provided equal weight to total needs and partial needs. In addition, the revised allocation included a hold harmless provision, under which no state would receive less in construction grant funds than it was allotted under the previous allocation.

FY1977 Allotment

For the FY1977 allocation, Congress provided funds under two appropriations acts, the Public Works Employment Appropriations Act of 1976 (P.L. 94-369) and the Supplemental Appropriations Act of 1977 (P.L. 95-26), each using a different allocation formula. The first act was a key development, as it reintroduced population as a factor in state allocation.

Prior to such enactments, EPA submitted a needs survey to Congress in 1975, and recommended that future allocation formulas focus on needs in particular key categories, including secondary treatment. At the time EPA Administrator Russell Train stated

There is serious doubt, however, that we will be able to provide accurate estimates of the total national needs, or of needs for each State, which would form an equitable basis for allocation of construction grant funds. Even [secondary treatment and other key categories] will be very difficult to refine for purposes of allocation because of the large variations in approach used by the States in estimating needs in these categories.

I believe that the fundamental differences in reported cost estimates for the construction of publicly owned wastewater treatment facilities highlighted by the last two surveys confirms our concerns about basing the allocation of Federal funds on "needs," at least as they are currently reported.²²

Based on concerns about "total needs" estimates, the Public Works Employment Appropriations Act of 1976 only included "partial needs" in the revised allocation and reintroduced a population factor. About a year later, the Supplemental Appropriations Act of 1977 included an allocation formula based on total needs (25%), partial needs (50%), and population (25%).

FY1978-FY1982 Allotment

The 1977 CWA amendments (P.L. 95-217) provided the allocation formula for FY1978 through FY1982, which included total needs (25%), partial needs (50%), and population (25%). The allocation provided that no state would receive less than one-half of one percent of total funds. The conference committee

²¹ S. 2812 (93rd Congress).

²² U.S. Senate Committee on Public Works, Subcommittee on Environmental Pollution, *The Environmental Protection Agency's 1974 Needs Survey*, Hearing, 93rd Cong., 2nd sess., September 11, 1974, Serial No. 93-H53. p. 15.

borrowed elements from both the Senate and House proposed legislation (S.1952 and H.R. 3199, respectively). Although the ratio in the final version was the same as H.R. 3199, it appears that conferees made some changes to allocation percentages that were not explained in the legislative history.

FY1983-FY1986 Allotment

The Municipal Wastewater Treatment Construction Grant Amendments of 1981 (P.L. 97-117) provided the allotment formula for CWA Title II grants from FY1983 through FY1986. For FY1982, the allotment mirrored the formula in the House legislation (H.R. 4503). For FY1983 through FY1985, the act used the average of the House and Senate formulas (S. 1716). This resulted in a combination of total needs (12.5%), partial needs (50%), and population (37.5%). The formula included a hold harmless provision that no state would receive less than 80% of what it would have received under the previous allocation, which was established in the 1977 CWA amendments.

FY1987-Present Day Allotment

The 1987 CWA amendments created the CWSRF program and the funding allocation percentages that generally remain in effect to this day.²³ The legislative history of the 1987 amendments does not include an explicit statement describing the factors that went into the final allocation formula.²⁴

During consideration of the legislation, the House favored retaining the formula adopted in 1981, which included total needs, partial needs, and population factors. The Senate formula was essentially needs-based with an unquantifiable population factor. The two formulas merged in ways that are not clear from available public documents, creating the set allocation percentages contained in CWA Section 205.²⁵ The allotments provide each state with a minimum of 0.5% of the total appropriation.

Highlights of Results from EPA's 2016 Report

The Water Resources Reform and Development Act of 2014 (P.L. 113-121) directed EPA to prepare a report to Congress “to determine whether [the current allotment] formula adequately addresses the water quality needs of eligible States, U.S. territories, and Indian tribes.”²⁶ EPA completed its report in 2016.²⁷ EPA noted in its report that since the original allotment in 1987, the Census Bureau has provided three population estimates (1990, 2000, and 2010), and EPA and the states have updated the needs estimates seven times.²⁸ In addition, the more recent needs estimates include an expanded list of wastewater infrastructure categories.

In its report, EPA identified a state's current allotment as “adequately reflecting its water quality needs” if it is within 10% of its potential allotment using revised needs and population data. EPA concluded “most

²³ In 1995, three districts of the U.S.-administered United Nations Trust Territory of the Pacific Islands, which previously had been eligible for CWA funds, became sovereign states by adopting a Compact of Free Association. As of FY1999, the Trust Territory, which had been receiving 0.1295% of available funds, was no longer eligible for grants under the act. EPA made an administrative adjustment to allotment totals for all other recipients for FY2000 and onwards to reflect this change.

²⁴ CWA Legislative History.

²⁵ 33 U.S.C. §1285(c)(3).

²⁶ In this context, the U.S. territories include the Commonwealth of the Northern Mariana Islands, Guam, and the U.S. Virgin Islands.

²⁷ EPA, *Review of the Allotment of the Clean Water State Revolving Fund (CWSRF), Report to Congress*, 2016, https://www.epa.gov/sites/production/files/2016-05/documents/review_of_the_allotment_of_the_cwrsf_report.pdf (hereinafter EPA Allotment Report).

²⁸ Since EPA's 2016 report, the Census Bureau has published the 2020 Census report.

states do not currently receive appropriated funds in proportion to their reported water quality needs or population, which demonstrates the inadequacy of the current allotment.”²⁹ In particular, EPA concluded:

- Compared with an allotment based on the most recent needs survey, EPA found the current formula adequately reflects the water quality needs for 17 states.
- Compared with an allotment calculated using 2010 population data, EPA found the current formula reflects the water quality needs for 14 states.

Table A-1 (in the **Appendix** of this testimony) compares the current CWSRF allotment percentages to allotment percentages based on (1) 2021 needs estimates and (2) 2010 Census data. These comparisons illustrate states’ needs estimates and populations have changed since the 1987 allocation.

EPA’s report provided three possible options for updating the allotment formula. EPA’s options included varying combinations of the following data elements:

1. **EPA Needs Survey Data from 2012:** Although each of EPA’s options includes a needs factor, EPA noted that the 2012 needs survey “underestimates” water quality needs.³⁰ For example, some states did not report data for all of the categories, including stormwater management and decentralized wastewater treatment.
2. **Population data from 2010:** EPA noted that Congress has historically included population as a factor in prior allocation formulas and “was very likely a factor in developing the original CWSRF allotment.” EPA chose to use the 2010 population count because “counts from the decennial census generally are regarded as more accurate on a State-by-State basis than population projections.”³¹
3. **Water quality impairment data:** EPA stated that this dataset might “compensate for the lack of completeness in the 2012 needs data,” particularly for nonpoint source pollution, stormwater, and decentralized wastewater treatment categories.³² However, EPA noted some limitations in this factor. In particular, the data do not indicate the extent or number of impairments (i.e., “all impaired waters is considered equal”). In addition, this factor might favor states with relatively longer shoreline miles (coastal states or Great Lakes states).
4. **Ratio of a state’s CWSRF assistance to its capitalization grant:** More than half of the states currently leverage their SRFs by using federal capital grants and state matching funds as collateral to borrow in the public bond market, thus increasing the pool of available funds for project lending. Cumulatively since 1988, leveraged bonds have comprised about 34% of total CWSRF funds available for projects.³³ This factor is a measure of the amount of CWSRF assistance provided by a state compared to its total CWSRF allocation for the most recent 10-year period. EPA points out that this factor might provide an incentive for a state to leverage its allotment even if it has no financial need.

Table 2 indicates the factors and their respective percentage weights that EPA included in each of the agency’s three allotment options. In each of the three options, EPA limits a state’s potential allotment decrease to 25% and potential increase to 200%.

²⁹ EPA Allotment Report, p. 5.

³⁰ EPA Allotment Report, p. 9.

³¹ EPA Allotment Report, p. 9.

³² EPA Allotment Report, p. 10.

³³ EPA, Clean Water State Revolving Fund (CWSRF) National Information Management System Report, “U.S. National Total,” <https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-cwsrf-national-information-management-system-reports>.

Table 2. Weight of Factors Used in EPA's Allotment Options

	2012 Needs Data	2010 Population	Water Quality	Ratio of CWSRF Assistance to Capitalization Grant
Option 1	70%	30%		
Option 2	50%	30%	20%	
Option 3	50%	30%	10%	10%

Source: EPA, *Review of the Allotment of the Clean Water State Revolving Fund (CWSRF), Report to Congress, 2016*, Table 2, https://www.epa.gov/sites/production/files/2016-05/documents/review_of_the_allotment_of_the_cwrsf_report.pdf.

Table 3 provides the results from each of EPA's three options. The table also includes the results from the three options if the limitations on decreases and increases are removed. Results in the table are presented as follows:

- Column A indicates the revised allotment under the respective option.
- Column B indicates the percentage change from the current allotment, with the limitations EPA imposed on the percentage decreases and increases.
- Column C indicates the results without constraints on decreases or increases.

In the table (and in CWA Section 205), a state's CWSRF allotment is presented in decimal form. For example, California's current allotment is 0.0726, which equates to 7.26% of the total CWSRF allotment. California's allotment under option 1 would be 0.0907 (Column A), which equates to 9.07% of the total allotment. Compared to its current allotment, California's allotment would increase by 25% under Option 1 (Column B). If the limitations for decreases and increases are removed from Option 1, California's allotment would increase by 31%.

Table 3. Comparison of Results from EPA's CWSRF Allotment Options and Percentage Change from Current Allotment

State or Territory	Current Allotment	Option 1			Option 2			Option 3		
A = Revised Allotment										
B = Percentage Change from Current Allotment with decreases limited to 25% and increases to 200%										
C = Percentage Change from Current Allotment with no limits on decreases or increases										
		A	B	C	A	B	C	A	B	C
Alabama	0.0114	0.0110	-3%	2%	0.0107	-6%	-1%	0.0111	-2%	2%
Alaska	0.0061	0.0050	-18%	-18%	0.0050	-18%	-18%	0.0050	-18%	-18%
Arizona	0.0069	0.0203	196%	216%	0.0167	143%	154%	0.0203	196%	231%
Arkansas	0.0066	0.0050	-25%	-25%	0.0050	-25%	-25%	0.0059	-11%	-7%
California	0.0726	0.0907	25%	31%	0.0855	18%	23%	0.0833	15%	20%
Colorado	0.0081	0.0155	91%	101%	0.0133	64%	72%	0.0147	81%	89%
Connecticut	0.0124	0.0138	11%	17%	0.0116	-7%	-2%	0.0139	12%	17%
Delaware	0.0050	0.0050	0%	0%	0.0050	0%	0%	0.0050	0%	0%
District of Columbia	0.0050	0.0067	34%	41%	0.0050	0%	5%	0.0056	13%	18%
Florida	0.0343	0.0695	103%	113%	0.0913	166%	179%	0.0766	123%	133%
Georgia	0.0172	0.0146	-15%	-11%	0.0140	-18%	-15%	0.0155	-10%	-6%
Hawaii	0.0079	0.0060	-24%	-20%	0.0059	-25%	-31%	0.0070	-11%	-7%
Idaho	0.0050	0.0050	0%	0%	0.0061	23%	29%	0.0068	37%	43%
Illinois	0.0459	0.0344	-25%	-41%	0.0344	-25%	-47%	0.0344	-25%	-44%
Indiana	0.0245	0.0225	-8%	-3%	0.0199	-19%	-15%	0.0217	-11%	-8%
Iowa	0.0137	0.0103	-25%	-38%	0.0103	-25%	-41%	0.0103	-25%	-22%
Kansas	0.0092	0.0108	18%	24%	0.0105	15%	20%	0.0114	25%	30%
Kentucky	0.0129	0.0176	36%	43%	0.0144	12%	17%	0.0163	26%	31%
Louisiana	0.0112	0.0140	26%	32%	0.0332	198%	286%	0.0279	150%	161%
Maine	0.0079	0.0059	-25%	-27%	0.0059	-25%	-36%	0.0061	-22%	-19%
Maryland	0.0246	0.0323	32%	38%	0.0291	18%	24%	0.0288	17%	22%
Massachusetts	0.0345	0.0259	-25%	-23%	0.0259	-25%	-37%	0.0259	-25%	-30%
Michigan	0.0437	0.0327	-25%	-62%	0.0393	-10%	-6%	0.0327	-25%	-32%
Minnesota	0.0187	0.0140	-25%	-44%	0.0179	-4%	0%	0.0157	-16%	-12%
Mississippi	0.0091	0.0076	-17%	-13%	0.0070	-24%	-20%	0.0081	-11%	-7%
Missouri	0.0281	0.0281	0%	5%	0.0225	-20%	-16%	0.0236	-16%	-13%
Montana	0.0050	0.0050	0%	0%	0.0050	0%	0%	0.0050	0%	0%
Nebraska	0.0052	0.0073	40%	47%	0.0063	22%	27%	0.0077	49%	55%
Nevada	0.0050	0.0092	84%	93%	0.0087	74%	82%	0.0097	94%	102%

State or Territory	Current Allotment	Option 1			Option 2			Option 3		
New Hampshire	0.0101	0.0076	-25%	-43%	0.0076	-25%	-39%	0.0076	-25%	-33%
New Jersey	0.0415	0.0508	22%	29%	0.0416	0%	5%	0.0431	4%	8%
New Mexico	0.0050	0.0050	0%	0%	0.0050	0%	0%	0.0050	0%	0%
New York	0.1121	0.0875	-22%	-18%	0.0840	-25%	-31%	0.0840	-25%	-31%
North Carolina	0.0183	0.0201	10%	15%	0.0202	10%	15%	0.0208	13%	18%
North Dakota	0.0050	0.0050	0%	0%	0.0050	0%	0%	0.0050	0%	0%
Ohio	0.0572	0.0467	-18%	-14%	0.0429	-25%	-23%	0.0429	-25%	-23%
Oklahoma	0.0082	0.0086	5%	11%	0.0092	12%	17%	0.0107	30%	35%
Oregon	0.0115	0.0119	4%	10%	0.0119	4%	8%	0.0125	9%	13%
Pennsylvania	0.0402	0.0302	-25%	-30%	0.0302	-25%	-37%	0.0302	-25%	-35%
Puerto Rico	0.0132	0.0099	-25%	-21%	0.0099	-25%	-27%	0.0099	-25%	-24%
Rhode Island	0.0068	0.0052	-24%	-20%	0.0051	-25%	-27%	0.0084	23%	29%
South Carolina	0.0104	0.0078	-25%	-52%	0.0078	-25%	-45%	0.0078	-25%	-33%
South Dakota	0.0050	0.0050	0%	0%	0.0050	0%	0%	0.0050	0%	0%
Tennessee	0.0147	0.0111	-25%	-33%	0.0111	-25%	-32%	0.0111	-25%	-23%
Texas	0.0464	0.0483	4%	10%	0.0476	3%	7%	0.0471	2%	6%
Utah	0.0053	0.0050	-7%	-7%	0.0050	-7%	-7%	0.0053	0%	4%
Vermont	0.0050	0.0050	0%	0%	0.0050	0%	0%	0.0050	0%	0%
Virginia	0.0208	0.0290	40%	47%	0.0274	32%	38%	0.0284	37%	43%
Washington	0.0177	0.0171	-3%	2%	0.0156	-12%	-8%	0.0165	-7%	-3%
West Virginia	0.0158	0.0119	-25%	-36%	0.0119	-25%	-46%	0.0119	-25%	-41%
Wisconsin	0.0274	0.0206	-25%	-27%	0.0206	-25%	-31%	0.0206	-25%	-31%
Wyoming	0.0050	0.0050	0%	0%	0.0050	0%	0%	0.0050	0%	0%
American Samoa	0.0054	0.0041	-25%	-58%	0.0041	-25%	-58%	0.0041	-25%	-58%
Guam	0.0039	0.0063	61%	110%	0.0063	61%	99%	0.0063	61%	108%
Northern Mariana Islands	0.0025	0.0023	-11%	-11%	0.0023	-11%	-11%	0.0023	-11%	-11%
Virgin Islands	0.0031	0.0024	-25%	-28%	0.0024	-25%	-14%	0.0024	-25%	-26%

Source: Prepared by CRS. Data from EPA, *Review of the Allotment of the Clean Water State Revolving Fund (CWSRF), Report to Congress, 2016*, Tables C-1 through C-4, https://www.epa.gov/sites/production/files/2016-05/documents/review_of_the_allotment_of_the_cwsrf_report.pdf.

Notes: Although the table in CWA Section 205(c) provides a total of 0.25% for the U.S. territories, appropriations acts have increased this total annual allotment to 1.5% since FY2019. EPA considers the “current allotment” to include a 1.5% total allotment to the territories.

Table 4 includes additional analysis from EPA’s report. The table assesses the potential allotments from the three options by grouping states’ results into several categories, which generally include increases, decreases, and the minimum allotment (0.5%). As the table indicates, the number of states in each category is similar across the three options that include limitations. For example, in the limited options, the number of states with decreased allotments ranged from 28 to 30, and the number of states with increases less than 100% ranged from 15 to 18.

The table also illustrates the role that the limitations play in the options’ results. If the allotment limits are not included, a number of states would potentially face decreases greater than 25% and more states would receive increases above 100%. For example, 13 states would have allotment decreases greater than 25% under Option 1. In addition, the results yield a wider range under the non-constrained options, ranging from a decrease of 62% (Michigan) to an increase of 216% (Arizona).

Table 4. EPA’s Comparison of Potential Allotment by Option

Number of States with a Potential Allotment Result						
	Increase of Less than 100%	Increase of 100% or More	Decrease	Decrease More than 25%	Remain at Minimum Allocation (0.5%)	Range of Results
Option 1 – limited	17	2	29	NA	8	-25% - 196%
Option 2 – limited	15	3	30	NA	7	-25% - 198%
Option 3 – limited	18	3	28	NA	7	-25% - 197%
	Increase of Less than 100%	Increase of 100% or More	Decrease of 25% or Less	Decrease More than 25%	Remain at Minimum Allocation (0.5%)	Range of Results
Option 1 – not limited	18	4	13	13	8	-62% - 216%
Option 2 – not limited	17	3	14	15	7	-59% - 286%
Option 3 – not limited	18	5	15	11	7	-59% - 231%

Source: Prepared by CRS. Data from EPA, *Review of the Allotment of the Clean Water State Revolving Fund (CWSRF), Report to Congress*, 2016, Tables 3 and 4, https://www.epa.gov/sites/production/files/2016-05/documents/review_of_the_allotment_of_the_cwrsf_report.pdf.

Allotment Formulas in Related Programs

The following sections describe other water infrastructure grant programs and the allotment formulas used to distribute funds eligible recipients, namely states, U.S. territories, and Indian tribes.

Drinking Water State Revolving Fund Program³⁴

The Safe Drinking Water Act (SDWA) authorizes the Drinking Water State Revolving Fund (DWSRF) program, the primary federal financial assistance program for drinking water infrastructure. SDWA Section 1452 directs EPA to use annual DWSRF appropriations to make “capitalization grants” to states (including Puerto Rico and the District of Columbia).³⁵ From these funds, states make primarily subsidized loans to public water systems for projects needed for SDWA compliance or to further the act’s public health protection goals.

Generally analogous to the CWA needs estimates for wastewater infrastructure, the SDWA directs EPA to assess the “capital improvement needs” of eligible public water systems every four years.³⁶ In contrast to the CWA, which includes a statutory allotment for SRF capitalization grants, SDWA directs EPA to distribute DWSRF funds among the states based on the results of the most recent quadrennial needs survey, with each state receiving at least 1% of the available funds.³⁷

SDWA directs or authorizes EPA to set aside amounts of the DWSRF appropriation for various program purposes before allotting the remaining funds among the states. EPA calculates the amount available for allotment among the states after deducting amounts reserved for tribal grants and grants for territories, unregulated contaminant monitoring, health effects studies, and oversight of American iron and steel requirements.

Before distributing funds among the states, EPA reserves 2% of the appropriated amounts for grants to Indian tribes and Alaska Native villages for water infrastructure projects.³⁸ The law also directs EPA to provide grants to the Virgin Islands, the Commonwealth of the Northern Mariana Islands, American Samoa, and Guam, using not more than 0.33% of the funds available for grants to the states.³⁹ Similar to the CWSRF, Congress has regularly increased this amount to 1.5% in appropriations acts.⁴⁰

³⁴ Elena Humphreys, Analyst in Environmental Policy, authored this section.

³⁵ SDWA §1452(a)(1); 42 U.S.C. §300j-12(a)(1).

³⁶ SDWA §1452(h); 42 U.S.C. §300j-12(h). EPA must report each needs assessment to Congress. In 2018, America’s Water Infrastructure Act of 2018 (P.L. 115-270) amended SDWA to explicitly require EPA to include an “assessment of costs to replace all lead service lines” of eligible public water systems subsequent needs surveys.

³⁷ SDWA §1452(a)(1)(D); 42 U.S.C. §300j-12(a)(1)(D).

³⁸ Under SDWA Section 1452(i) [42 U.S.C. §300j-12(i)], EPA may use 1.5% of the amounts appropriated annually to make grants to Indian tribes and Alaska Native villages. Since FY2010 (Department of the Interior, Environment, and Related Agencies Appropriations, 2010 [P.L. 111-88]), Congress has authorized EPA to reserve up to 2.0% of the appropriated funds for Indian tribes and Alaska Native villages. This authority was included in P.L. 112-74 and has continued through the terms and conditions of subsequent appropriations.

³⁹ For the amount set-aside for grants to territories, the act requires EPA to allot funds among the territories in accordance with factors that are used to determine the allotments of grants for the public water system supervision (PWSS) program. SDWA Section 1443(a)(4) identifies several factors to make PWSS grant allotments, including “on the basis of population, geographical area, number of public water systems, and other relevant factors.” EPA states that the territory allotments from the DWSRF set-aside are determined according to the following: population (5%), geographical area (2.5%), the number of community water systems and non-transient non-community water systems (14%), the number of transient non-community water systems (3.5%), and the “infrastructure needs” of the water systems in each territory as identified in the most current needs survey (75%).

⁴⁰ SDWA §1452(j) [42 U.S.C. §300j-12(j)]. For FY2010, Congress authorized EPA to reserve up to 1.5% of the appropriated funds for territories (P.L. 111-88). This authority has continued through subsequent appropriations acts.

As of March 2022, EPA has published six needs surveys, and the agency has used the survey data to determine state allotment percentages for DWSRF capitalization grants.⁴¹ The DWSRF allocation formula does not limit the amount that a state's allotment may decrease or increase based on new needs estimates. After the sixth needs survey,

- 14 states' allotments decreased, with allotment decreases ranging between 4% and 21%;
- 16 states' allotments increased, with allotment increases ranging between 1% and 74%;
- 23 states' allotments remained the same, the vast majority of which remained at the minimum 1% allotment level.⁴²

CWA Section 221 Sewer Overflow and Stormwater Reuse Municipal Grants Program

The Consolidated Appropriations Act, 2001 (P.L. 106-554) established a grant program in CWA Section 221 in 2000 (33 U.S.C. 1301) to address sewer overflow issues. America's Water Infrastructure Act of 2018 (AWIA; P.L. 115-270) amended the grant program by modifying the eligibility provisions to include stormwater infrastructure. Although originally authorized in 2000, Congress provided the first appropriation (\$28 million) for this program in FY2020 (P.L. 116-94). Under this program, EPA will provide grants to states, which then provide sub-awards to eligible entities. To date, EPA has not issued any grants for this program.

CWA Section 221 directs the EPA to develop an allocation formula to distribute grants to the states based on "the total needs of the State for municipal combined sewer overflow [CSO] controls, sanitary sewer overflow [SSO] controls, and stormwater identified in the most recent [needs estimate] ... and any other information the Administrator considers appropriate."⁴³

EPA published the allocation formula for this program in the *Federal Register* in February 2021.⁴⁴ EPA noted that the most recent needs estimate (2012 data) did not include complete estimates for every state. Thus, EPA decided to include additional factors based on their common availability across states and ability to serve as "surrogates for CSO, SSO, and stormwater infrastructure needs."⁴⁵ These additional factors include annual average precipitation, total population, and urban population. EPA weighted the factors as follows:

- 50% for the most recent CSO, SSO, and stormwater infrastructure needs estimates
- 16.7% for annual average precipitation
- 16.7% for total population
- 16.7% for urban population

In addition, each state will receive at least 0.5% of the total allocation.

⁴¹ For more information see the U.S. Environmental Protection Agency's (EPA's) website "Annual Allotment of Federal Funds for States, Tribes, and Territories" at <https://www.epa.gov/dwsrf/annual-allotment-federal-funds-states-tribes-and-territories>.

⁴² Prepared by CRS from EPA's website "Annual Allotment of Federal Funds for States, Tribes, and Territories" at <https://www.epa.gov/dwsrf/annual-allotment-federal-funds-states-tribes-and-territories>.

⁴³ 33 U.S.C. §1301.

⁴⁴ EPA, "State Formula Allocations for Sewer Overflow and Stormwater Reuse Grants," 86 *Federal Register* 11287, February 24, 2021.

⁴⁵ Ibid.

CWA Section 106 Water Pollution Control Grants⁴⁶

Title I of the 1972 CWA established the Section 106 Water Pollution Control Grant Program, which authorized EPA to provide grants to states and interstate agencies to assist in administering programs for the prevention, reduction, and elimination of pollution.⁴⁷ These grants support efforts to monitor and assess water quality, develop and review water quality standards, list impaired waters and develop total maximum daily loads, administer and enforce certain CWA permits, develop watershed and groundwater plans, and provide training and public information.⁴⁸

CWA Section 106(b) requires that “from the sums appropriated in any fiscal year, the Administrator shall make allotments to the several States and interstate agencies in accordance with regulations promulgated by him on the basis of the extent of the pollution problem in the respective States.” EPA’s regulations allot 2.6% of the funds appropriated for CWA Section 106 grants to interstate agencies.⁴⁹ The formula then establishes an allotment ratio for each state (and territory) based on six components EPA selected to reflect the extent of states’ water pollution problems. The six elements and their weights are listed below:⁵⁰

1. 35% for water quality impairment
2. 15% for population of urbanized area
3. 13% for point sources
4. 13% for nonpoint sources
5. 12% for surface water area
6. 12% for groundwater use.

In addition, the formula provides a funding floor for each state, with provisions for periodic adjustments for inflation and a maximum funding level. EPA regulations provide that the data used in the formula must be updated at least every five years. If appropriations for the program remain the same as the previous year, states receive their previous year’s allotment. If appropriations increase from the prior year, the formula calls for all states to receive a funding floor (i.e., the previous year’s allotment) and an adjustment for inflation calculated using the consumer price index. Any additional funding is distributed based on the extent of water quality problems in each state or territory (or portion of the state for the interstate allotments). The formula also establishes a funding ceiling limiting an allotment from increasing more than 150% from the previous year. In years of decreased funding, each allotment is reduced by an equal percentage.

⁴⁶ Laura Gatz, Analyst in Environmental Policy, authored this section.

⁴⁷ P.L. 92-500; 33 U.S.C. §1256. In 1987, Congress amended the CWA to include provisions that allow EPA to treat an Indian tribe in a manner similar to a state for the purpose of providing Section 106 funding (P.L. 100-4; 33 U.S.C. §1377).

⁴⁸ EPA, “Grants for State and Interstate Agencies under Section 106 of the Clean Water Act,” <https://www.epa.gov/water-pollution-control-section-106-grants/grants-state-and-interstate-agencies-under-section-106>. Section 106 funds cannot be used for construction, operation, or maintenance of wastewater treatment plants, or for activities financed by other federal grants.

⁴⁹ EPA’s allotment formula is codified at 40 CFR §35.162. Six interstate agencies receive CWA §106 funds, including the New England Interstate Water Pollution Control Commission (NEIWPCC), the Interstate Environmental Commission (IEC), the Delaware River Basin Commission (DRBC), the Interstate Commission on the Potomac River Basin (ICPRB), the Ohio River Valley Water Sanitation Commission (ORSANCO), and the Susquehanna River Basin Commission (SRBC).

⁵⁰ 40 CFR §35.162. Each of the six components includes elements and sub-elements identifying metrics to be considered in deciding allocations. EPA regulations established component weights to account for the fact that not all of the formula components contribute equally to the extent of states’ pollution problems.

SDWA Small and Disadvantaged Communities Grant Program⁵¹

In 2016, the Water Infrastructure Improvements for the Nation (WIIN) Act (P.L. 114-322) amended SDWA to add a drinking water grant program to help assist disadvantaged or small communities afford projects needed to comply with SDWA regulations. Eligible projects include investments needed for SDWA compliance, household water quality testing, and assistance that benefits a community on a per-household basis. Eligible grant recipients include public water systems or tribal water systems that serve a disadvantaged community or a community of 10,000 or fewer individuals or a state on behalf of an underserved community.⁵² SDWA Section 1459A directs EPA to give priority to projects and activities that benefit underserved communities, and does not identify an allotment formula for awarding grant funds.

In April 2019, EPA announced the distribution of FY2018 and FY2019 funding for these grants among the states and territories, using a formula similar to the DWSRF allotment formula, with a 2% allotment for tribes.⁵³ In November 2020, EPA announced that the agency would provide \$20 million for public water systems serving tribal communities.⁵⁴ EPA stated that the agency allotted such funds in the same manner as the tribal set-aside from the DWSRF, namely providing 2% of the amount to each EPA regional office, and distributing the remainder of funds based on the results of the tribal drinking water infrastructure survey.⁵⁵ For FY2021 funding, EPA reports that the agency used “an algorithmic formula that includes factors for population below poverty, small water systems, and underserved communities,” with a 10% reservation of funds for projects serving Indian tribes and Alaska Native village, to determine the state allotments.⁵⁶

Concluding Observations

Prior to 1972, the federal government administered a relatively small funding program that supported the construction of municipal wastewater treatment plants. At the time, the federal government provided wastewater infrastructure funding on the basis of population.

The 1972 CWA authorized a comparatively large grant program for wastewater treatment plant construction. Annual appropriations provided funding to the states based on a CWA formula. In its early years, the formula was based on wastewater infrastructure needs estimates. In subsequent years, Congress added a factor to the formula to account for population, but needs estimates remained the dominant factor (see **Table 1**).

The CWA amendments in 1987 established the CWSRF program, which eventually replaced the CWA Title II grants program. The 1987 amendments included statutory allocation percentages for each state and U.S. territory in CWA Section 205. Based on the allocation formulas in the House and Senate bills

⁵¹ Elena Humphreys, Analyst in Environmental Policy, authored to this section.

⁵² For the purposes of this grant program, *underserved community* is defined to mean “a political subdivision of a State that, as determined by the Administrator, has an inadequate system for obtaining drinking water” (42 U.S.C. §300j-19a(a)(1)).

⁵³ EPA, Final Allotments of FY2018 and FY2019 Appropriations for the Assistance to Small and Disadvantaged Communities Grants, Authorized under Section 2104 of the Water Infrastructure Improvements for the Nation Act, April 29, 2019, https://www.epa.gov/sites/production/files/2019-04/documents/wiin_2104_allotment_memo_april_2019.pdf.

⁵⁴ See EPA website “WIIN Act Section 2104: Assistance for Small and Disadvantaged Communities Tribal Grant Program,” at <https://www.epa.gov/tribaldrinkingwater/wiin-act-section-2104-assistance-small-and-disadvantaged-communities-tribal>.

⁵⁵ EPA, Assistance for Small and Disadvantaged Communities Tribal Drinking Water Grant Program Information, https://www.epa.gov/sites/default/files/2019-10/documents/final_guidance_for_tribal_section_2104_assistance_for_small_and_disadvantaged_communities_508.pdf.

⁵⁶ EPA, Final Allotments of FY2021 Appropriations for the Assistance to Small and Disadvantaged Communities Grants, Authorized under Section 2104 of the Water Infrastructure Improvements for the Nation Act, July, 27, 2021, <https://www.epa.gov/system/files/documents/2021-08/fy2021-initial-state-allotment-memo.pdf>.

that led to the CWA amendments, as well as previous formulas, Congress likely based the 1987 allocation on some combination of needs estimates and population, and perhaps other factors. However, the associated legislative history does not explicitly describe the factors or their weights that underlie the existing statutory allocation.

Since 1987, EPA, in coordination with the states, have produced seven needs surveys. The Census Bureau has updated population data through four subsequent U.S. decennial Censuses. None of this more recent information is reflected in the current allotment formula. Based on the difference between the current allotments and the revised needs surveys and population estimates, EPA concluded that “most states do not currently receive appropriated funds in proportion to their reported water quality needs or population, which demonstrates the inadequacy of the current allotment.”

Crafting an allotment formula has been one of the most debated issues during CWA reauthorizations. Given that the CWSRF is the primary assistance program for wastewater infrastructure, the dollars involved are relatively significant. Considerations of states’ potential allotment decreases or increases bear heavily on discussions of policy choices reflected in alternative formulations. If Congress deliberates on amendments to the CWSRF allotment to states, policymakers would have a range of options, including those provided in EPA’s 2016 report. These options consist of different combinations of needs estimates, population, and other factors.

In addition, Congress may look to the allocation formulas of other water infrastructure programs, such as the parallel DWSRF program. Under this program, EPA allots funding among the states based on the results of the most recent DWSRF needs survey, which SDWA requires EPA to perform every four years. Some may argue that factors other than needs estimates should be included for CWSRF allocation. EPA pointed out that its most recent wastewater infrastructure needs survey did not contain estimates for all eligible wastewater infrastructure project categories to every state. In particular, EPA stated that only 35 states submitted stormwater management data and only half of the states reported needs data for decentralized systems.⁵⁷

In addition, policymakers could include limitations similar to those provided in EPA’s options, namely constraints on the magnitude of decreases or increases a state would face under revised allocation formula. Congress included such limitations in prior formulas for wastewater infrastructure funding. Other funding programs have included such factors (e.g., CWA Section 106 program).

Since 1987, Congress has on several occasions considered legislation that would have modified the allotment formula. For example, in the 111th Congress, the House passed H.R. 1262, which would have created a tiered approach: for appropriations up to a certain level (\$1.35 billion), the current formula would apply, and for appropriations funds in excess of that amount, allotment would be done in accordance with the most recently reported funding needs. During the same Congress, the Senate Committee on Environment and Public Works reported S. 1005 (Cardin), which would have amended the allotment formula to follow the needs survey available at the time (i.e., 2004 data). In addition, the Senate bill would have guaranteed a minimum 0.75% share (rather than 0.5% as under current law), and generally insured that no state’s allotment would increase by more than 50% or decreased by more than 25% compared with its current allotment.

In the 116th Congress, S. 3211 (Rubio) would have directed EPA to update the allocation formula using the most recent (1) needs survey data (50%), (2) Census data (30%), and (3) water quality impairment data (20%). These factors and associated weights match Option 2 from EPA’s 2016 report. In addition,

⁵⁷ EPA, *Clean Watersheds Needs Survey 2012, Report to Congress*, 2016, http://www.epa.gov/sites/production/files/2015-12/documents/cwns_2012_report_to_congress-508-opt.pdf.

the bill would have limited a state's allotment decrease to 25% and increase to 200% compared to its current allotment (also in line with EPA's Option 2).⁵⁸

In the 117th Congress, S. 3031 (Rubio) would amend the allotment formula. For FY2022 through FY2026, EPA would first provide states with the same amount of funding they received in FY2021. Then, EPA would allocate any available appropriations in FY2022 through FY2026 exceeding FY2021 levels to the states based on the each state's population in proportion to the total U.S. population. In FY2021, the total CWSRF appropriation available was \$1.64 billion. IIJA provided supplemental annual appropriations for FY2022 through 2026 (e.g., \$2.0 billion in FY2022). This would be in addition to appropriations Congress may provide through the annual appropriations process. For FY2027 and subsequent fiscal years, the bill directs EPA to develop an allotment formula based on the most recent needs survey, with each state receiving a minimum 1.0% allocation (the current minimum is 0.5%).⁵⁹

⁵⁸ Representative Waltz introduced an identical bill in the 116th Congress (H.R. 5628).

⁵⁹ Representative Waltz introduced an identical bill in the 117th Congress (H.R. 5653).

Appendix. Additional Results from EPA's 2016 Study

As an illustration of how states' needs estimates and populations have changed over time, **Table A-1** compares the current CWSRF allotment percentages to allotment percentages based on (1) 2021 needs estimates and (2) 2010 Census data. The table also includes percentage changes for these two factors. As the table data indicate for example, some states percentage allotments would increase by more than double (e.g., Arizona, Colorado, Florida, and Nevada) based on 2012 needs data.

Table A-1. Selected Results from EPA's 2016 CWSRF Allotment Report

State/Territory	Current Allotment	Allotment Based on 2012 Needs Estimates and Percentage Changed from Current Allotment		Allotment Based on 2010 Census Data and Percent Change from Current Allotment	
Alabama	1.1%	1.0%	-11%	1.5%	31%
Alaska	0.6%	0.5%	-18%	0.5%	-18%
Arizona	0.7%	2.2%	223%	2.0%	191%
Arkansas	0.7%	0.5%	-25%	0.9%	37%
California	7.3%	8.6%	18%	11.6%	60%
Colorado	0.8%	1.6%	102%	1.6%	93%
Connecticut	1.2%	1.6%	27%	1.1%	-10%
Delaware	0.5%	0.5%	0%	0.5%	0%
District of Columbia	0.5%	0.9%	83%	0.5%	0%
Florida	3.4%	7.8%	129%	5.9%	71%
Georgia	1.7%	0.9%	-48%	3.0%	76%
Hawaii	0.8%	0.7%	-10%	0.5%	-36%
Idaho	0.5%	0.5%	0%	0.5%	0%
Illinois	4.6%	2.1%	-54%	4.0%	-13%
Indiana	2.4%	2.5%	2%	2.0%	-17%
Iowa	1.4%	0.8%	-42%	0.9%	-31%
Kansas	0.9%	1.2%	34%	0.9%	-3%
Kentucky	1.3%	2.0%	58%	1.4%	5%
Louisiana	1.1%	1.5%	33%	1.4%	27%
Maine	0.8%	0.6%	-19%	0.5%	-36%
Maryland	2.5%	4.0%	64%	1.8%	-27%
Massachusetts	3.4%	2.9%	-16%	2.0%	-41%
Michigan	4.4%	1.0%	-77%	3.1%	-30%
Minnesota	1.9%	0.8%	-58%	1.7%	-11%
Mississippi	0.9%	0.7%	-20%	0.9%	1%
Missouri	2.8%	3.4%	20%	1.9%	-34%
Montana	0.5%	0.5%	0%	0.5%	0%

Nebraska	0.5%	0.8%	61%	0.6%	10%
Nevada	0.5%	1.0%	101%	0.8%	69%
New Hampshire	1.0%	0.6%	-36%	0.5%	-51%
New Jersey	4.1%	6.4%	54%	2.7%	-34%
New Mexico	0.5%	0.5%	0%	0.6%	29%
New York	11.2%	10.4%	-7%	6.0%	-46%
North Carolina	1.8%	1.7%	-6%	3.0%	62%
North Dakota	0.5%	0.5%	0%	0.5%	0%
Ohio	5.7%	5.4%	-5%	3.6%	-37%
Oklahoma	0.8%	0.8%	-4%	1.2%	43%
Oregon	1.1%	1.3%	11%	1.2%	4%
Pennsylvania	4.0%	2.3%	-43%	4.0%	-2%
Puerto Rico	1.3%	1.0%	-26%	1.2%	-13%
Rhode Island	0.7%	0.6%	-8%	0.5%	-27%
South Carolina	1.0%	0.5%	-52%	1.4%	39%
South Dakota	0.5%	0.5%	0%	0.5%	0%
Tennessee	1.5%	0.6%	-62%	2.0%	34%
Texas	4.6%	3.9%	-17%	7.9%	69%
Utah	0.5%	0.5%	-7%	0.9%	61%
Vermont	0.5%	0.5%	0%	0.5%	0%
Virginia	2.1%	3.2%	56%	2.5%	20%
Washington	1.8%	1.7%	-6%	2.1%	19%
West Virginia	1.6%	1.2%	-25%	0.6%	-64%
Wisconsin	2.7%	2.1%	-25%	1.8%	-36%
Wyoming	0.5%	0.5%	0%	0.5%	0%
American Samoa	0.5%	0.2%	-58%	0.2%	-58%
Guam	0.4%	0.8%	110%	0.6%	61%
NMI	0.3%	0.2%	-11%	0.2%	-11%
Virgin Islands	0.3%	0.2%	-28%	0.4%	34%

Source: Prepared by CRS. Data from EPA, *Review of the Allotment of the Clean Water State Revolving Fund (CWSRF), Report to Congress, 2016*, Table B-1 and Table B-2, https://www.epa.gov/sites/production/files/2016-05/documents/review_of_the_allotment_of_the_cwrsf_report.pdf. Cle

Notes: NMI = Northern Mariana Islands. Although the table in CWA Section 205(c) provides a total of 0.25% for the U.S. territories, appropriations acts have increased this total annual allotment to 1.5% since FY2019. Therefore, EPA considers the “current allotment” to include a 1.5% total allotment to the territories.